



## **A leading banking and financial services company, banks on IoT and analytics to reduce energy consumption.**

The bank met energy consumption reduction targets and improved occupant comfort with predictive insights and remote services.

### **The Client**

Leading banking and financial services company with a banking network of 5,000 branches and 16,000 ATMs spread across the country.

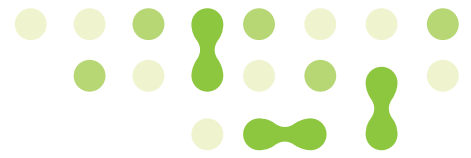
### **The Challenge**

The bank had an annual expense of over 70 million USD towards electrical energy consumption. Typically, 90% of this consumption was in the network of its retail branches. Their challenge was controlling and optimizing energy costs because of the varying sizes of the branches and their vast geographical spread. In 2015, to optimize energy consumption without compromising customer and employee comfort, the bank decided to implement an energy management system at over 500 branches and chose EcoEnergy Insights as their partner.

### **The Solution**

The client and EcoEnergy Insights (a Carrier company) entered a multi-year engagement to address the energy management needs of the retail branches. EcoEnergy Insights carried out the system integration and connected the branches to the CORTIX™ building IoT platform. The platform collects daily energy and temperature data records from the branches and weather data feeds from local weather stations. Additionally, the static data like equipment details, branch size, and electricity spend was also fed into the platform which was analyzed using its machine learning algorithms.

The CORTIX platform utilizes the Service Window® framework to analyze energy consumption of the branches each day. Service Windows are the unique energy profiles that a typical branch goes through during its daily operations. Based on effective monitoring of energy consumption in these service windows, the platform highlighted higher energy consumption during non-business hours and holidays and enabled actions to control them. It also enabled enhanced control of the customer area, the ATM area & server rooms using its IoT controllers at each branch. Remote visibility and live key performance indicator-tracking using intuitive dashboards provided relevant information about branch energy consumption patterns and variations during business and non-business hours along with Management Information System (MIS) reports.



The simple yet powerful interface ensured that the administration team could easily understand and monitor operational anomalies, energy profiles and thermal compliances. This engagement is supported by the BluEdge™ Command Center provided by EcoEnergy Insights. The center provides IoT-enabled remote services with remote commissioning, monitoring and diagnostics. The command center team tracks persistent deviations weekly, for enhanced visibility of the health of critical cooling equipment, occupant comfort, demand optimization and much more. The team also assists in minimizing security threats by reporting intrusions during non-banking hours and server health.

The center also proactively coordinated & enabled site-level corrections by ensuring rigorous worklist tracking and reporting. Weekly actionable worklists helped to improve compliance, energy efficiency and asset performance. The insights were also used by the leadership for prioritizing decisions such as equipment replacement.

## The Result

Service Window framework-based international performance measurement & verification protocol (IPMVP) methodology was being used to validate the enterprise-wide average energy savings. Over the 5 years since the program began in 2016, the following results were achieved:

- **12%** average energy savings
- **2.2 million tons** of average CO2 emission avoided annually
- **16%** improvement in customer comfort from baseline
- **18%** improvement in employee comfort from baseline

This program won a Confederation of Indian Industry (CII) 'Best Energy Efficient Case Study' award at the 2017 National Energy Efficiency Circle competition.



Write to us at [info.ecoenergy@carrier.com](mailto:info.ecoenergy@carrier.com) and elevate your business now.

**About EcoEnergy Insights** - EcoEnergy Insights is a global leader in providing AI and IoT solutions for building and equipment operations. Their CORTIX™ platform collects data from multiple sources, analyzes it, acts on defined deviations autonomously and offers predictive actionable insights and prescriptive recommendations. The award-winning platform, combined with expert human analytics, has been delivering industry-leading outcomes in comfort, maintenance and energy efficiency across industries such as retail, hospitality and banking. EcoEnergy Insights is a part of Carrier, the leading global provider of healthy, safe, sustainable and intelligent building and cold chain solutions.

For more information on EcoEnergy Insights and the CORTIX™ platform, visit [www.ecoenergyinsights.com](http://www.ecoenergyinsights.com) and [www.cortix.ai](http://www.cortix.ai).

